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Brussel, November 1952.

CONTRIBUTION A L'ÉTUDE DES DIPTÈRES
DE L'URUNDI (1).

III. — *Bibionidæ* et *Dorilaidæ*,

by D. ELMO HARDY (Honolulu, Hawaii).

The following report deals with material in the Institut royal des Sciences naturelles de Belgique, collected in the Urundi Territory by M. F. J. FRANÇOIS. This small collection contained but ninety-eight specimens, sixty-seven *Bibionidæ* and thirty-one *Dorilaidæ*. This is the first collection which I have seen from this interesting region and considerable new information has been gained from this study.

I am indebted to M. A. COLLART for the privilege of studying this important collection.

Unless otherwise mentioned, all of the species reported herein were collected in the Urundi Territory by F. J. FRANÇOIS.

Family *BIBIONIDÆ*.

Bibio afer LOEW.

Bibio afer LOEW, 1854, Neue Beitrage zur Kennt. der Dipt. 2: 1.

Two specimens are in the collection from Bururi, Bututsi-Mugamba, VII-VIII-1948.

(1) Pour les « CONTRIBUTION A L'ÉTUDE DES DIPTÈRES DE L'URUNDI », voir ce Bulletin : 1951, t. XXVII, n° 54, et 1952, t. XXVIII, n° 42.

Philia erythræa (BEZZI).

Dilophus erythræa BEZZI, 1905, Firenze Boll. Soc. Ent. Ital., 37 : 205-206.

Fifty-four specimens are in the collection from Bururi, alt. 1.950 m, 13-II-1949 (volant en essaim au-dessus d'un champ de maïs).

Philia nupta SPEISER.

Philia nupta SPEISER, 1914, Berl. Seits. Deutsch. Ent. Ges., 1.

Eight specimens are present from Urundi : Kitega, 18-VI-1950, 1.750 m.

Plecia freemani HARDY.

Plecia freemani HARDY, 1952, Jour. Kans. Ent. Soc. 25 (2) : 81.

One specimen from Kitega, 1.750 m, 18-VI-1950.

Plecia ugandænsis HARDY.

Plecia ugandænsis HARDY, 1948, Brit. Mus. Ruwenzori Exped. 1934-35, 1 (6) : 119-121.

Two specimens are in the collection from Bururi, alt. 1.950 m, III-1948 and III-1949.

Family *DORILAIIDÆ*.*Dorilas* (*Cephalosphæra*).

Those *Dorilas* which have an appendix on the fourth vein, beyond the posterior crossvein.

KEY TO THE *Dorilas* (*Cephalosphæra*) KNOWN
FROM THE ETHIOPIAN REGION.

1. — Legs yellow, except for the brownish coxæ and apical subsegments of the tarsi 2.
 — At least the femora ringed with black 4.
2. — Third costal section equal in length to, or shorter than, the fourth and much shorter than the fifth section ... 3.
 — Third costal section two times longer than the fourth and equal in length to the fifth ... *pallidifemorals* n. sp.
3. — Third costal section very short, only one-third to one fourth as long as the fourth. Femora slender, fexor spines weak *lucidus* HARDY.

- Third section equal in length to the fourth. Femora very stout and each with five to seven pairs of large black flexor spines *magnispinosus* HARDY.
- 4. — Third costal section three to four times longer than the fourth and two times longer than the fifth. Basal one-third of the wings hyaline, apical two-thirds smoky fumose (Belgian Congo) *collarti* HARDY.
- Third section about one and one-third times longer than the fourth; fifth section longer than the third. Wings uniformly fumose (Urundi) *françoisi* n. sp.

Dorilas (Cephalosphæra) françoisi n. sp.

Figs. 1 and 15.

This species is related to *D. (Cephalosphæra) germanicus* (ACZEL), of Europe, but is readily distinguished by having abdominal terga four and five polished; by having stiff bristles on the sides of the first tergum; by having the anterior crossvein at the basal third of the discal cell, not near middle; by the shorter acuminate third antennal segment and the shorter third costal section in the wing; the fifth costal section is slightly longer than the third not « viel kürzer ». The male genitalia are also different, as shown in fig. 1 b. and in ACZEL, 1940 : 165, figs. 8-12. The species is distinguished from *D. (Cephalosphæra) collarti* HARDY by having the wings evenly but lightly fumose; by having the anterior crossvein situated at the basal third of the discal cell; by having the third costal section but little longer than the fourth and shorter than the fifth and by having terga four and five polished.

Male. The junction of the compound eyes is almost equal in length to the frontal triangle. The face and the front are about equal in width and each is gray pubescent with a subshining black line running longitudinally down the middle. The occiput is gray pollinose except for the brownish upper portion. The antennæ are brown, the third segment is short acuminate (fig. 15). Thorax : Chiefly brown pollinose, more gray on the sides. The thorax, including the propleura, is entirely bare. The humeri and the knobs of the halteres are dark brown to black. Wings : Light brown fumose, the stigma fills all of the third costal section. The third section is slightly longer than the fourth and is two-thirds as long as the fifth section. The anterior crossvein is situated at about the basal

third of the discal cell. The appendix on the fourth vein is about equal in length to the anterior crossvein. The sections of the fourth vein before and after the appendix are straight. Legs : Chiefly black ; the extreme apices of the femora and tibiæ and the bases of the tibiæ are yellow. The tarsi are brown to black. The femora are slender and flexor spines are not developed. The tibiæ have no apical spines and there are no strong bristles on the outside surfaces of the hind tibiæ. Abdomen : The first tergum is entirely opaque gray to brown and with two or three bristles on each side. The second and third terga are opaque brown except for a polished black band across the apical margins. The fourth and fifth terga are entirely polished black. Genitalia : About equal in length to the fourth and fifth abdominal segments and with a large membranous area covering the entire apex of segment eight (fig. 1). The seventh segment is not visible from a dorsal view. The ninth segment is black and the claspers are brown to black. The latter are simple and appear to be symmetrical in shape. The genitalia have not been studied in a relaxed condition.

Length : body, 4.5 mm ; wings, 5.8 mm.

Female unknown.

Holotype male, Rumonge, alt. 780 m ; 20-II-1949.

Type returned to the Institut royal des Sciences naturelles de Belgique.

Dorilas (Cephalosphæra) pallidifemoralis n. sp.

Figs. 2 and 16.

This species is related to *D. (Cephalosphæra) collarti* HARDY. It is distinguished by the all yellow femora ; by the acute third antennal segment ; the uniformly fumose wing and by differences in wing venation and genital structures as discussed in the description.

Male. The junction of the compound eyes is slightly longer than the frontal triangle. The front is gray to brownish pubescent, the face is silvery gray. The face is equal in width to the lower portion of the front. The upper third of the occiput is brownish pollinose, the remainder is gray. The antennæ are entirely brownish yellow, the third segment is acute below (fig. 16). Thorax : Brown pollinose on the dorsum, brownish gray on the sides. The propleura are dark brown. The halteres are yellow with brownish knobs. The propleura each have a

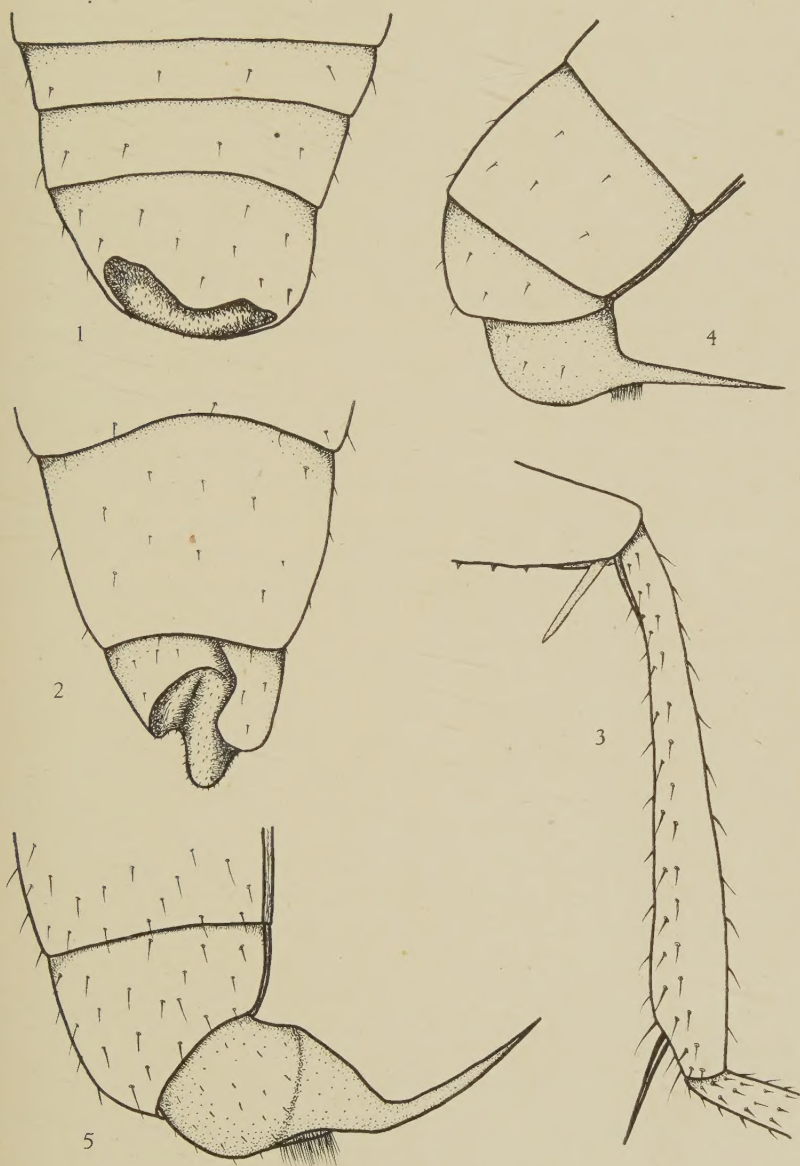


Fig. 1. — *Dorilas* (*Cephalosphæra*) *françoisi* n. sp., male genitalia dorsal.

Fig. 2. — *D.* (*Cephalosphæra*) *pallidifemoralis* n. sp., male genitalia, dorsal.

Fig. 3. — *D.* (*Eudorylas*) *abruptus* n. sp., front tibia and apex of femur.

Fig. 4. — *Ibid.*, female ovipositor.

Fig. 5. — *D.* (*Eudorylas*) *angustus* n. sp., female ovipositor.

fan of strong hairs. The remainder of the thorax is sparsely haired. No well-developed hairs are present on the hind margin of the scutellum. Legs: Entirely yellow except for the brownish colored coxæ. The femora are moderately thickened and flexor spines are well developed on all pairs. Tibial spines are not developed and the hind tibiæ have some erect bristles in the middle of the outside surface. Wings: Uniformly brownish fumose, the stigma fills all of the third costal section. The third section is two times longer than the fourth and is equal in length to the fifth section. The anterior crossvein is situated near the basal third of the discal cell. The appendix on the fourth vein is about equal in length to the small crossvein. The section of the fourth vein beyond the appendix is slightly bowed. Abdomen: The first two segments are opaque gray to brown or blackish. The third tergum is chiefly opaque brown to black, polished brown only on the posterior lateral margins. The fourth tergum is opaque brown to black on the basal third and polished brown on the apical portion. The fifth tergum is entirely polished brown to black except, for a thick opaque brown line across the base, and except for the opaque gray-brown lateral margins. The abdomen is sparsely pilose. Genitalia: About three-fourths as long as the fifth abdominal segment and with a large membranous area covering all of the apex and extending basad almost to the anterior median margin of the eighth segment on both the dorsum and the venter. The membranous area forms a large keel in the middle of the apex of the eighth segment (fig. 2). The ninth segment is dark brown to black. The claspers are yellow-brown and are about equal in size and shape.

Length: body, 4.6 mm; wings, 6.0 mm.

Female unknown.

Holotype male, Batama, Congo Belge, 25-III-1946.

Type returned to the Institut royal des Sciences naturelles de Belgique.

Dorilas (Eudorylas).

Those *Dorilas* which have the propleura bare.

Dorilas (*Eudorylas*) *abdominalis* (LOEW).

Pipunculus abdominalis LOEW, 1857, Ofvers. Kongl. vet. Akad. Forhandl. 14: 374.

Three specimens are in the collection from Bururi, alt. 1,950 m, VI-1948 to 13-III-1949.

Dorilas (Eudorylas) abruptus n. sp.

Figs. 3, 4 and 17.

This species appears to be very close to *D. spinosus* HARDY (of the Neotropical region). It fits this species in most structural details. It differs by having the abdomen pollinose and by lacking the longitudinal depression down the middle of the ovipositor base; the middle coxæ also each have a row of prominent black bristles at their apices. The species runs to couplet 27 of my Belgian Congo key (HARDY, 1950 : 9) and to couplet 64 of my African key (HARDY, 1949 : 12). It is distinguished from the species in these groups by having strong spurs at the apices of the first two pairs of tibiae.

Female. Head: The face and the front are approximately equal in width. The front is chiefly dark gray, with a narrow shining line extending longitudinally down the middle. The occiput is opaque gray pollinose. The first two antennal segments are brown, the third is yellow, tinged with brown. The third segment is long acuminate, the rostrate portion is almost as long as the remainder of the segment (fig. 17). Thorax: Brownish pollinose on the dorsum, gray on the sides. The humeri are yellow, the knobs of the halteres are yellow-brown. Thorax bare or nearly so, marginal hairs on scutellum very small. Legs: Chiefly yellow, the coxæ are brown to black and the femora are each discolored with brown to blackish colored rings at the middle of the segment. The femora are rather slender, flexor spines are developed only on the first two pairs. The first two pairs of femora each have a flap of tissue, on the underside of the apex, which projects downward and is rather spine-like in appearance (fig. 3). This is apparently weakly sclerotized and fits into a groove on the underside of the base of the tibia. The first two pairs of tibiae each have a strong spine just below the apex. The middle coxæ each have four or five strong black bristles in a row at their apices. The hind tibiae have no strong bristles on the outside surfaces. Wings: Subhyaline, very faintly fumose. The stigma fills all of the third costal section. The third section is approximately equal in length to the fourth and the two combined are slightly longer than the fifth section. The anterior crossvein is situated at about the basal third of the discal cell and the last section of the fourth vein is nearly straight. Abdomen: Opaque gray to brown. The first tergum is gray pollinose and has a fan of long bristles on each side. The second tergum is

all gray except for a brown area down the middle. The other terga are chiefly brown, gray on the sides and apices except for the posterior median margins. The sixth tergum is gently concave but not excised on the hind margin. The abdomen is broadest at the junctions of segments four and five. Ovipositor: The base is globose and has no depressed area. The piercer is yellow, is straight and just slightly longer than its base (fig. 4). The ovipositor extends almost to the base of the fourth abdominal segment.

Length: body, 3.3 mm; wings, 4.0 mm.

Male unknown.

Holotype female, Rumonge, 19-II-1950, 780 m. One paratype female, Lusinga, Congo Belge, 8-XII-1947, 1,760 m (G. F. DE WITTE).

Type returned to the Institut royal des Sciences naturelles de Belgique. The paratype has been returned to the Institut des Parcs Nationaux du Congo Belge.

Dorilas (*Eudorylas*) *angustus* n. sp.

Figs. 5 and 18.

This species runs to couplet 29 of my Belgian Congo key (HARDY, 1950: 10) but *D. lubuti* (CURRAN) and *D. congoensis* HARDY have a fan of hairs on each propleuron. The narrow front of *D. angustus* is also characteristic. In my key to the African species it runs imperfectly to *lubuti*, in couplet 52 (HARDY, 1949: 11).

Female. Head: The front is much narrower than the face, it is approximately half as wide. The front and the face are silvery gray pubescent, the former is faintly subshining black just below the ocelli. The occiput is entirely gray except for some brownish pollen on the upper portion. The first two antennal segments are yellow, tinged with brown. The third segment is bright yellow and is elongate in form but is acute (not drawn out into a long point) at the apex (fig. 18). The bases of the aristæ are yellow. Thorax: Dusted with brownish gray on the dorsum, gray on the sides. The humeri, bases of halteres and the hind margin of the scutellum are yellow. The anterior basalare and the upper portion of the pteropleura are also yellowish in color. The tegulæ are yellow-red. The propleura are bare. The thorax is sparsely haired, the hairs on the hind margin of the scutellum are small and inconspicuous. Legs: All yellow, except for the brown to

black coxæ and the brownish apical subsegments of the tarsi. The femora are rather slender and well developed flexor spines are present on the first two pairs. The front and middle tibiæ each have a strong yellow spine at the apex below. The hind tibiæ each have one strong, erect bristle on the outside surface of the swollen portion. Wings: Lightly fumose, the stigma fills all of the third costal section. The third section is just slightly shorter than the fourth and the two combined are nearly two times longer than the fifth section. The anterior crossvein is situated at the basal two-fifths of the discal cell and the last section of the fourth vein is strongly curved. The last section of the fifth vein is longer than the posterior crossvein. Abdomen: Chiefly opaque gray pollinose, brownish on the dorsum of segments three to six. The abdomen is moderately covered with short yellow hairs and the sides are nearly straight. The first tergum has two black bristles on each side. The hind margin of the sixth tergum is slightly concave, not excised. Ovipositor: The base is short and subglobose in shape. The piercer is rufous in color and is curved upward. It is nearly two times longer than its base but does not extend to the base of the fifth abdominal segment (fig. 5).

Length: body, 5.0 mm; wings, 6.0 mm.

Male unknown.

Holotype female, Bururi, riv. Sikuvayaye, alt. 1.800 m, 20-XII-1948.

Dorilas (Eudorylas) discretus n. sp.

Figs. 6-8 and 19.

This species runs to *D. inornatus* HARDY in couplets 30 of both my key to the African *Dorilas* and my key to the species known from the Belgian Congo (HARDY, 1949 and 1950). The male genital characters are, however, very different in the two species. *D. discretus* is best distinguished by the unusual development of the ninth segment (fig. 7), by the shape and development of the eighth segment and of the clasping structures.

Male. Head: The junction of the compound eyes is greater than the length of the frontal triangle. The frontal triangle and the face are dark gray pubescent. The face is equal in width or slightly broader than the widest portion of the front. The antennæ are dark brown to black. The third segment is long rostrate below, the beak-like portion is about

equal to the length of the remainder of the segment (fig. 19). Thorax: Gray-brown on the dorsum, gray on the sides. The humeri and stems of halteres are yellow; the knobs of the halteres are brown. The thorax is sparsely haired, the propleura are bare. Legs: The femora are chiefly black, with narrow yellow bases and apices. The tibiae and tarsi are yellow, except for the apical subsegments. The front and middle tibiae each have a well developed apical spur. The hind tibiae have no strong bristles on the outside of the swollen portion. Wings: Almost hyaline, very faintly fumose. The stigma fills all of the third costal section. The third section is slightly shorter than the fourth, and the two sections combined are one and one-third times longer than the fifth section. The anterior crossvein is situated near the basal two-fifths of the discal cell and the last section of the fifth vein is straight or nearly so. The last section of the fifth vein is equal in length to the posterior crossvein. Abdomen: Entirely opaque, gray-brown on the dorsum, gray on the sides; with indistinct, broadly interrupted, gray fasciae on the apices of terga two to five. The sides of the abdomen are rounded, it is broadest at the junction of segments three and four. The first tergum has four black bristles on each side, the abdomen otherwise is sparsely haired. Genitalia: Very irregular and asymmetrical in shape. The basal portion of the ninth segment is plainly visible from a dorsal view and occupies the entire side of the genitalia (fig. 6). The eighth segment possesses a membranous area on the right of the apex, this extends basad over the dorsum to the base of the segment. A well developed keel also extends longitudinally down the middle of the eighth segment (fig. 6). The genitalia, from a dorsal view, are about one and one-third times longer than the fifth abdominal segment. The ninth segment is largely yellow-brown to rufous in color and is nearly two times longer than the fifth segment of the abdomen, as seen in lateral view (fig. 7). The claspers are asymmetrical in shape. The outer is produced into a slender apical lobe which is thickly pilose on its outer surface. The inner clasper is broad and suboval in shape (fig. 8).

Length: body, 3.9 mm; wings, 4.4 mm.

Female unknown.

Holotype male, Bururi, alt. 1.950 m, 13-III-1949.

The type has been returned to l'Institut royal des Sciences naturelles de Belgique.

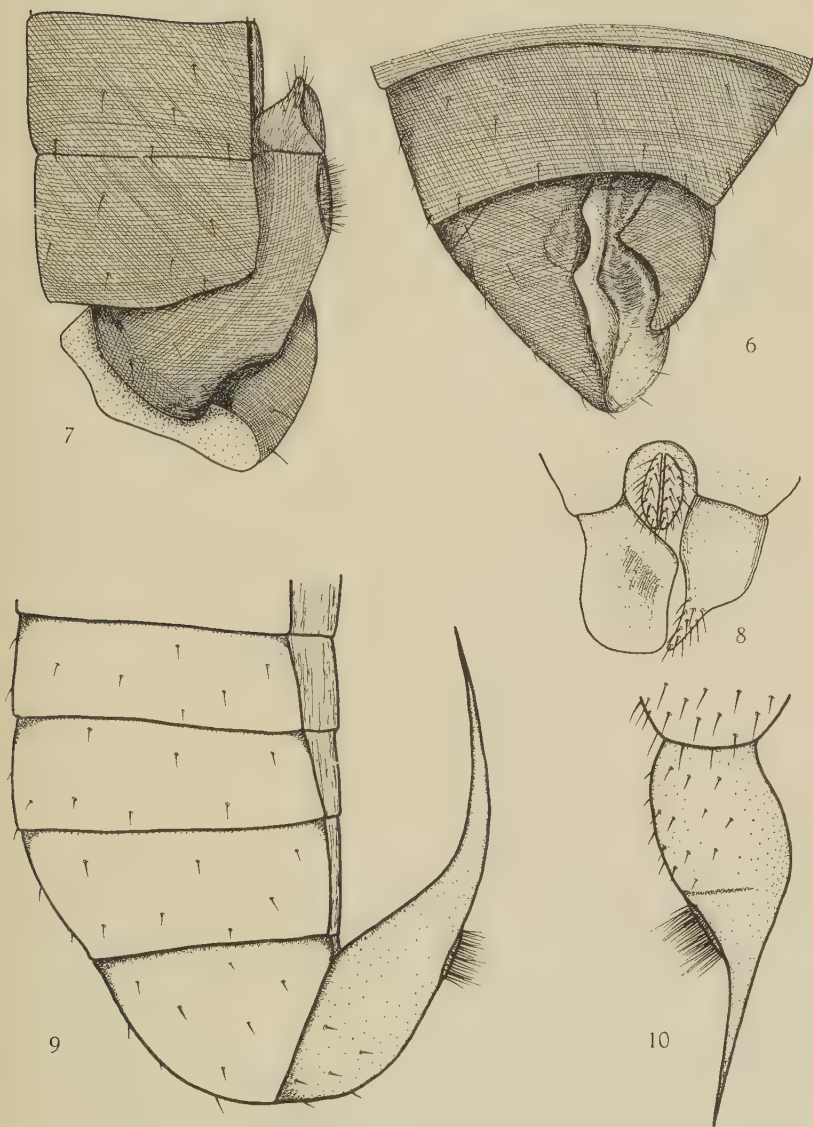


Fig. 6. — *Dorilas (Eudorylas) discretus* n. sp., male genitalia, dorsal.

Fig. 7. — Ibid., male genitalia, lateral.

Fig. 8. — Ibid., claspers of male.

Fig. 9. — *Dorilas (Eudorylas) unanims* HARDY, female ovipositor, lateral.

Fig. 10. — *Dorilas (Dorilas) cautus* n. sp., female ovipositor.

Dorilas (Eudorylas) inornatus HARDY?

Dorilas (Eudorylas) inornatus HARDY, 1949, Mém. Inst. roy. Sci. nat. Belg., 2nd ser., fasc. 36 : 37.

One female specimen in the collection fits *D. inornatus* very closely, except that the third antennal segment is yellow; the ovipositor is slightly curved and it is somewhat larger in size (body, 4.5 mm; wings, 6.6 mm). It probably represents an undescribed species but more specimens of both sexes should be studied in order to properly place it.

The specimen is from Bururi, 2,000 m, 4-XII-1949.

Dorilas (Eudorylas) mutillatus (LOEW).

Pipunculus mutillatus LOEW, 1857, Ofver. Kongl. vet. Akad. Forhandl. 14 : 374.

Four specimens are in the collection from the following localities : Bururi, alt. 2,000 m, 12-IX-1948; Rumonge, alt. 800 m, 22-VI-1948; Nyanza (Lac), 780 m, 17-IX-1949 and Kitega, 1,250 m, 24-VI-1950.

Dorilas (Eudorylas) sordidatus HARDY.

Dorilas (Eudorylas) sordidatus HARDY, 1950, Inst. des Parcs Nat. du Congo Belge, fasc. 62 : 36-37.

Two specimens at hand, a male and a female, appear to belong to *sordidatus*. There are some discrepancies, however, in the characters and one or more species (distinct from *sordidatus*) may be involved.

The male specimen differs from the typical *sordidatus* by having the third section of the costa twice as long as the fourth and almost equal in length to the fifth section. It runs to *falcatus* HARDY in my previous keys (HARDY, 1949 and 1950) but is distinguished by the presence of very strong bristles on the outside surface of each hind tibia and also by the brown fumose wings. The specimen at hand has six long black bristles near the middle portion of each hind tibia. These are much stronger than in other specimens which have been seen. The visible genitalia appear to conform with those of *sordidatus*.

The female specimen also appears to fit *sordidatus* except that the disc of the scutellum, as well as the hind margin, is rather densely covered with short erect hairs and the third and fourth costal sections combined are about three-fourths

as long as the fifth section. The ovipositor is also slightly shorter than in typical *sordidatus* and extends only to about the base of the third abdominal segment.

Both specimens are from Bururi, 2.050 m, 15-V-1949 (survolant colonne de fourmis rouges).

Dorilas (Eudorylas) unanimus HARDY.

Fig. 9.

Dorilas (Eudorylas) unanimus HARDY, 1949, Bull. Inst. roy. Sci. nat. Belg., 25 (39) : 4.

Two female specimens are at hand which apparently belong here. This sex has not previously been described. They fit the description of the male in most details. The front is silvery gray pubescent except for a subshining black area just below the ocelli. The front is very slightly narrower than the broadest portion of the face. Abdomen : Opaque brown on the dorsum and gray on the sides with broadly interrupted gray fasciæ on the hind margins of the segments. The sixth tergum is gently concave on its hind margin, not excised. Ovipositor : The base is oblong and is largely polished black. The piercer is yellow-red, curved upward, and is about twice as long as its base. The piercer extends to, or beyond, the apex of the second abdominal segment (fig. 9).

Length : body, 4.2 mm ; wings, 5.3 mm.

The specimens are from Bururi, riv. Sikuvyaaye, 1950.

Dorilas (Eudorylas) n. sp.

One female specimen at hand is related to *D. mutillatus* (LOEW) and *D. sordidatus* HARDY. It appears to be distinct from either of these but it is perhaps best that it not be described until more specimens can be studied. The species is differentiated from *mutillatus* by the long slender, and straight, ovipositor of the female. The piercer extends to the middle coxæ (if the abdomen were straightened out it would extend to about the apex of the thorax). This character also will separate it from *sordidatus*. It also differs from the latter species in having the anterior crossvein situated near the middle of the discal cell and the third and fourth costal sections combined are nearly two times longer than the fifth section. The petiole of the cubital cell is not so elongated as in *sordidatus*.

The specimen is from Bururi, 2.000 m, 23-X-1949.

Dorilas (Dorilas).

Those *Dorilas* which have a fan of hairs on each propleuron.

Dorilas (*Dorilas*) *cautus* n. sp.

Figs. 10 and 20.

This species very closely resembles *D.* (*Eudorylas*) *mutillatus* (LOEW) and runs to that species in both of my keys dealing with African *Dorilas* (HARDY, 1949, couplet 23 and 1950, couplet 37). It is readily distinguished from this species as well as the other species that fit in the same portion of these keys by the presence of a fan of hairs on each propleuron. The two specimens at hand were mixed in with specimens of *D. mutillatus* when the collection was first sorted.

Female. **Head:** The front is entirely silvery gray pubescent except for the extreme upper portion; the upper one-eighth is subshining black. The front is slightly expanded in the median portion. The face is silvery white and is as broad as the lower portion of the front. The occiput is gray except for a brownish gray area behind the vertex. The antennæ are brown, the third segment is short acute (fig. 20). **Thorax:** Brown on the dorsum, grayish on the sides. The humeri are dark brown to black, the halteres are yellow. The propleura each have a fan of pale hairs. The dorsocentral, and marginal hairs on the mesonotum and scutellum, are moderately long and conspicuous. The disc of the scutellum also has numerous short hairs. **Legs:** The coxæ are black, the trochanters, tibiæ and the first four subsegments of the tarsi are yellow. The femora are yellow at the bases and apices of the segments, with broad black bands around the middle portions. The femora are moderately thickened and flexor spines are developed on all pairs. Apical spurs are not developed on the tibiæ and the hind pair have no unusually strong bristles on the outside surface. **Wings:** Nearly hyaline, just faintly fumose. The stigma fills all of the third costal section. The third section is just slightly shorter than the fourth and the two combined are about equal in length to the fifth section. The anterior cross-vein is situated near the middle of the discal cell and the last section of the fourth is gently curved. The last section of the fifth vein is about equal to the length of the posterior cross-vein. **Abdomen:** Predominantly gray, opaque brownish along the anterior margins and the median portions of the segments. The first tergum has a clump of black bristles on

each side, the remainder of the abdomen is rather thickly covered with short, erect hairs. The sides of the abdomen are nearly straight. The hind margin of the sixth tergum is not excised and the base of the ovipositor is not grooved. Ovipositor : The base is black and oblong in shape. The piercer is rufous, straight and slightly longer than its base (fig. 10). It extends nearly to the base of the second abdominal segment.

Length : body, 4.0 mm ; wings, 5,2 mm.

Male unknown.

Holotype female, Bururi, 2.050 m, 15-V-1949 (survolant colonne de fourmis rouges). One female paratype from the same locality, 1.950 m, 26-V-1949.

The type has been returned to the Institut royal des Sciences naturelles de Belgique. The paratype has been deposited in the United States National Museum.

Dorilas (Dorilas) conspectus HARDY.

Dorilas (Dorilas) conspectus HARDY, 1949, Mém. Inst. roy. Sci. nat. Belg., 2nd ser., fasc. 36 : 27.

One female specimen is present from Rumonge, Nyanza, V-1948 (Sur le Lac Tanganyika, rive Est).

Dorilas (Dorilas) damasi HARDY.

Dorilas (Dorilas) damasi HARDY, 1950, Inst. des Parcs Nat. du Congo Belge, fasc. 62 : 17-18.

One specimen is present from Bururi (For.), 2.000 m, 30-IX-1949.

Dorilas (Dorilas) extimus n. sp.

Figs 11-12.

This species is closely related to *D. visendus* HARDY and runs to this species (couplet 23) in my key to the Belgian Congo *Dorilas* (HARDY, 1950 : 9). In my key to the African *Dorilas* (HARDY, 1949 : 7) it runs to couplet 8 but is separated from *meruensis* HARDY by having a propleural fan and from *angustifacies* HARDY by having the face not narrowed.

D. extimus is distinguished from *visendus* by having the femora black and with strong black extensor hairs ; by having the anterior crossvein situated near the middle of the discal cell ; the antennæ all brown to black in color and by the differences in the male genitalia (see figs. 11 and 14).

Male. **Head :** The compound eyes are joined on the front for a distance equal to about half the length of the frontal triangle. The frontal triangle is dark gray pubescent with a narrow, shining black line extending down the middle. The face is gray and is equal in width to the broadest portion of the front. The occiput is opaque black above and gray on the sides. The antennæ are brown to black. The third segment is short acute (fig. 8 a). **Thorax :** Brown on the dorsum, subshining black, lightly grayed on the sides. The humeri are black, the halteres are yellow tinged with brown. The propleural fan is well developed, the hairs are dark brown in color. The dorso-central hairs are well developed as are those on the sides of the mesonotum and on the hind margin of the scutellum. **Legs :** The coxæ are black. The trochanters are yellow-brown. The femora are largely black, with yellow bases and apices. The tibiæ are yellow, discolored with brown in the median portion. The tarsi are yellow-brown except for the black apical subsegment. The coxæ and trochanters of the first two pairs of legs have a row of strong black bristles at their apices, above. The femora are moderately thickened and all have strong flexor spines and long black extensor hairs. The hind tibiæ have a row of strong erect bristles on the outside surface of the swollen portion. **Wings :** Faintly brownish fumose, the stigma fills all of the third costal section. The third section is equal in length to the fourth and the two combined are equal to the fifth. The anterior crossvein is situated near the middle of the discal cell and the last section of the fourth vein is very slightly curved. **Abdomen :** The first three terga are opaque brown to black on the dorsum and gray on the sides. The fourth and fifth terga are polished black with a narrow opaque brown to black band on their anterior margins. The sides of the abdomen are slightly rounded, it is broadest at about segment three. **Genitalia :** About three-fourths as long as the fifth abdominal segment and with an apical membranous area (fig. 11). The ninth segment is barely visible from a dorsal view. On the venter the membranous area extends to the basal margin of the eighth segment. The ninth segment is about as long as the eight, as seen from a lateral view (fig. 12). The claspers are bilobed at apices and appear to be uniform in size and shape.

Length : body, 4.5 mm ; wings, 5.5 mm.

Female unknown.

Holotype male, Bururi, 2.050 m, 15-V-1949 (survolant colonne de fourmis rouges).

Type returned to the Institut royal des Sciences naturelles de Belgique.

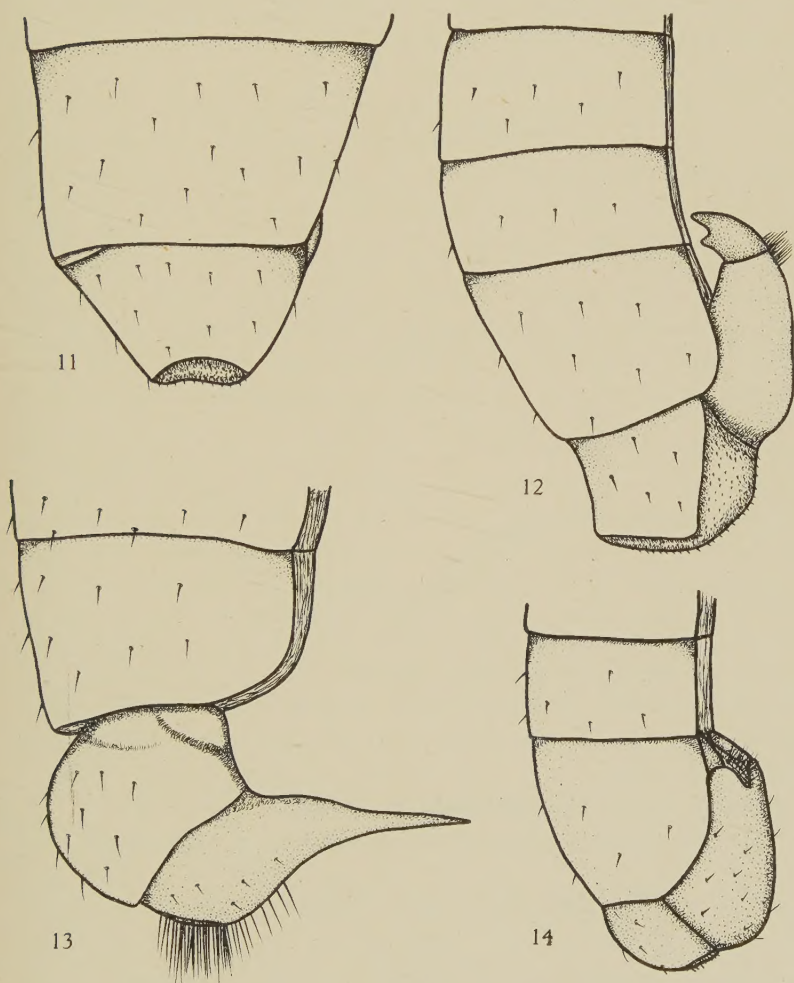


Fig. 11. — *Dorilas (Dorilas) extimus* n. sp., male genitalia, dorsal.

Fig. 12. — Ibid., male genitalia, lateral.

Fig. 13. — *Dorilas (Dorilas) lubuti* (CURRAN), female ovipositor.

Fig. 14. — *Dorilas (Dorilas) visendus* HARDY, male genitalia, lateral.

Dorilas (Dorilas) lubuti (CURRAN).

Fig. 13.

Pipunculus lubuti CURRAN, 1929, Amer. Mus. Novit. 340 : 1-2.

Three female specimens are at hand which obviously belong to this species. They agree with the original description and with male specimens in the writer's collection. The female has not previously been described.

Female. Agreeing in most respects with the description of the male (HARDY, 1949 : 42). **Head :** The front is entirely silvery gray pubescent and is strongly narrowed on the upper portion. Just above the antennæ the front is broader than the face, on the upper portion it narrows down to about the width of one ocellus. **Legs :** In addition to the details I gave in my revision of the African *Dorilaidæ* (l. c.), the femora are moderately slender and all possess well developed flexor spines. The front and middle tibiæ each possess two strong tibial spurs (these are much more developed than in the male specimens at hand). **Wings :** The third costal section is about equal in length to the fourth and is about two-thirds as long as the fifth section. In my previous description, I said the third was slightly longer than the fourth and about equal in length to the fifth. **Abdomen :** Colored as in the male. The hind margin of the sixth tergum is straight, not excised. **Ovipositor :** Brown in color and suboval in shape, with no groove on the dorsal portion. The piercer is short and straight and is equal or slightly longer than its base. The piercer and the base of the ovipositor are separated by a distinct suture. The piercer does not extend as far as the base of the sixth abdominal segment (fig. 13).

Length : body, 6.0 mm ; wings, 7.5 mm.

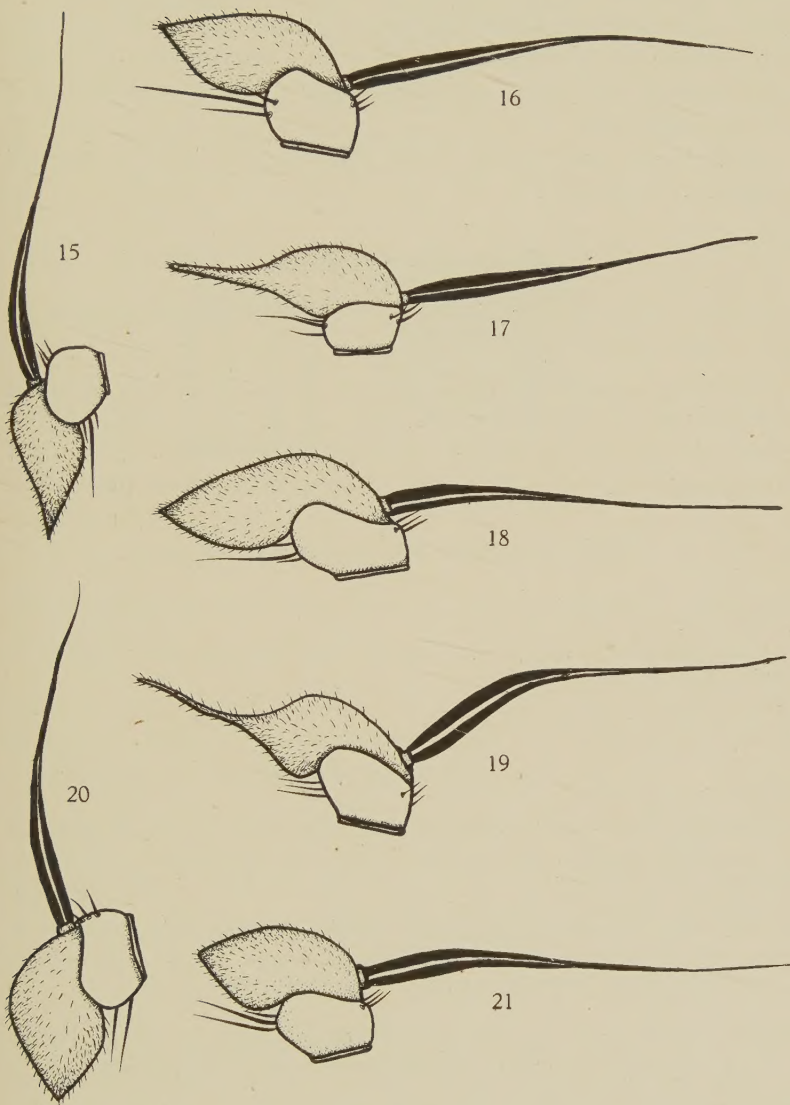
The specimens are from Bururi, 2,000 m, 4/9-XII-1950.

Dorilas (Dorilas) visendus HARDY.

Fig. 14.

Dorilas (Dorilas) visendus HARDY, 1950. Inst. des Parcs Nat. du Congo Belge, 62 : 23-24.

One female specimen is in the collection. It differs from the typical *visendus* by having the femora all yellow and by lacking any red coloration on the sides of the abdomen. The following details will make the original description of the male genitalia



Antennæ.

- Fig. 15. — *Dorilas (Cephalosphæra) françoisi* n. sp.
 Fig. 16. — *Dorilas (Cephalosphæra) pallidifemoralis* n. sp.
 Fig. 17. — *Dorilas (Eudorylas) abruptus* n. sp.
 Fig. 18. — *Dorilas (Eudorylas) angustus* n. sp.
 Fig. 19. — *Dorilas (Eudorylas) discretus* n. sp.
 Fig. 20. — *Dorilas (Dorilas) cautus* n. sp.
 Fig. 21. — *Dorilas (Dorilas) extimus* n. sp.

more complete (based upon a paratype not in this collection). The ninth segment is elongate and extends almost to the apex of segment eight. This is best seen in a lateral view (fig. 14). The claspers are short and simple, they appear to be uniform in size and shape.

The female specimen is from Buruhukiro, terr. de Bururi, 1.000 m, 7-XII-1950.

Tömösváryella congoana HARDY.

Tömösváryella congoana HARDY, 1950, Inst. des Parcs Nat. du Congo Belge, fasc. 62 : 45-46.

Three specimens are present from the following localities : Buruhukiro, Terr. de Bururi, 1.000 m, 7-XII-1950 ; Nyabitare, Moso de Ruxizi, 1.950 m, 19-VIII-1950 (Saison sèche) and Rumonge, Nyanza, V-1948 (Sur le Lac Tanganyika, rive Est).

Tömösváryella subvirescens (LOEW).

Pipunculus subvirescens LOEW, 1872, Berl. Ent. Zeitschr. 16 : 87.

One male specimen is present from Bururi, alt. 1.950 m, 8-I-1948.

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